### U.S. Antarctic Marine Living Resources Program

# 2008-2009 Weekly Field Reports Cape Shirreff, Livingston Island

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#### **Seabirds:**

- 1. The first gentoo penguin chicks were seen this past week. To date, one gentoo penguin reproduction study nest has hatched, 90% continue to incubate eggs, and 8% have failed. In the two weeks since chinstrap penguin clutch initiation 94% of the chinstrap penguin reproduction nests continue to incubate eggs and 6% have failed.
- 2. We continue to monitor known age penguins that were banded here as chicks. To date, 35 known aged gentoo penguins have nested. Of these, seven have failed and 28 are incubating. Thirty nine known aged chinstrap penguins have nested. Of these, six nests have failed and 33 remain on eggs.



- 3. Starting on 05 December and ending on 07 December we measured and weighed both eggs in 50 chinstrap penguin nests. Mean egg masses were slightly lower than the previous 11 year mean.
- 4. Fourteen of the brown skua pairs we monitor have initiated nests, and one has failed.

#### Pinnipeds:



- 5. We weighed our last weaned elephant seal pup on the day it's mother departed to sea, 5 December. It weaned almost two weeks later than the rest of the pups but weighed 20 kilos above the mean. In all we weighed 33 (26 males, 7 females) and the mean mass at weaning was 123.3 kilograms (st.dev.: 29.4). We tagged all pups that weaned on the Cape (N=39).
- 6. At the last census of fur seal study beaches on 7 December we recorded a total of 1084 adult females and 1105 pups (1087 live and 18 dead). If pup production is similar to last year then we have already passed the median date of pupping.



- 7. We began fur seal captures for attendance and foraging behavior on 4 December. As of yesterday (7 December) we have completed 12 of 30 captures we have planned for CCAMLR trip duration protocol. All females have been captured within 0-2 days postpartum.
- 8. Our VHF receiving stations (2) are recording and we downloaded our first data from them. Thus far none of the females we have instrumented have departed on her first trip to sea.
  - 9. To date only 64.6% (137/212) of our tagged female population have returned to Cape Shirreff. The natality rate for returned females so far



- is 85.4%. One of our returning females is 25 years old. She is the oldest female we have ever recorded at Cape Shirreff.
- 10. As of today, we have seen 56 fur seals that were tagged as pups in previous years (44.6% of these have been 9-year-olds from the 1999/00 cohort). Thirty-one (55.4%) of these have been females.

#### Weather:

11. Every day this week has had above average winds. Mean wind speed was 23.5 mph with maximum wind gust of 62mph. Winds were west or southwest all week. The mean temperature for the week was 1.1C. The high temperature for the week was 3.6C and the low was -1.4C. Total precipitation this week was 0.02 inches. Sunrise and sunset are now 03:02 and 22:40. Mean solar radiation this week was 12,512 watts per sq. meter.

## Camp:

- 12. The seabird and pinniped research is in full swing and has kept us all very busy with collecting and entering data. Camp is running smoothly but we spend most of our day out on the Cape monitoring our study sites.
- 13. We haven't seen a single iceberg since arriving and the Cape is nearly snow free now.

Submitted by AMLR staff currently residing at the Cape Shirreff field station, Livingston Island.



